

## DOCUMENT RESUME

ED 412 416

CE 074 987

AUTHOR Bieganski, Richard; Cadet, Jean-Paul  
TITLE Evolution of Employment and Qualifications in Motor Vehicle Repairs in France. Analysis of the Purpose of Coordinating the Overall System, Individual Organizations and Local Situations. Contribution for the CIRETOQ Meeting Organized at CEREQ/Marseille by CEDEFOP (November 20-21, 1995).  
INSTITUTION European Centre for the Development of Vocational Training, Thessaloniki (Greece).  
ISBN ISBN-92-827-8404-5  
PUB DATE 1996-00-00  
NOTE 42p.  
AVAILABLE FROM Bernan Associates, 4611-F Assembly Drive, Lanham, MD 20706-4391; 800/274-4888 (catalogue no. HX-98-96-881-EN-C: 5.50 European Currency Units).  
PUB TYPE Reports - Research (143)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS \*Auto Mechanics; Data Analysis; Data Collection; Economic Research; \*Education Work Relationship; Educational Opportunities; Educational Practices; Educational Research; Employment Opportunities; Employment Practices; \*Employment Projections; Employment Qualifications; Foreign Countries; Labor Market; \*Occupational Surveys; Postsecondary Education; Recruitment; \*Research Methodology; \*Trade and Industrial Education  
IDENTIFIERS \*France

## ABSTRACT

Considerations in analyzing and surveying the prospects for employment and training in the motor vehicle repair sector were explored by way of the example of France's motor vehicle repair sector. The discussion focused on the need to take the following steps: determine how labor is managed in the sector under consideration; consider the impact of changes in the sector's size and structure and the training and skill levels of its workers; trace trends regarding enterprise size and networks of enterprises; and identify specific regional features. A method of diagnosing employment opportunities and training needs was proposed that follows in the tradition of applied economics and is based on characterization of labor management as it is predominantly and structurally practiced in the sector and in the mutated forms that it may adopt in response to technical and economic changes. It was emphasized that achieving a good understanding of labor and qualification requirements in a sector requires taking a close look at situations in individual enterprises and local areas so as to allow for the wide range of different forms that the training-employment relationship assumes. (Contains 29 references.) (MN)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

# Evolution of employment and qualifications in motor vehicle repairs in France

Contribution for the CIRETOQ meeting organized at CEREQ/Marseille by CEDEFOP on 20 and 21 November 1995

European Centre for the Development of Vocational Training

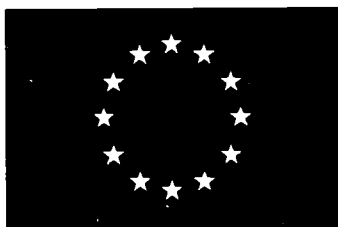
U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

*C. Politi*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)



BEST COPY AVAILABLE

Evolution of employment and qualifications  
in motor vehicle repairs in France

Analysis for the purpose of coordinating the overall  
system, individual organizations and local situations

Contribution for the CIRETOQ meeting  
organized at CEREQ/Marseille by CEDEFOP  
on 20 and 21 November 1995

This paper proposes a specific report established  
by CEREQ, the Centre for research and studies on  
skills and qualifications, on behalf of the automobile  
and bicycle repair and retail trade sector which gave  
a mandate to ANFA (Association Nationale pour  
la Formation dans l'Automobile) in order to realize  
studies for preparing this sector's negotiations in the  
framework of collective agreements with the regions in  
France.

## Authors

Richard Bieganski  
Jean-Paul Cadet  
CEREQ, Marseille

First edition, Thessaloniki 1996

Published by:

CEDEFOP — European Centre for the Development of  
Vocational Training

Marinou Antipa 12, **GR-57001 Thessaloniki**

Tel.: 30-31+49 01 11, Fax: 30-31+49 01 02

E-mail: [info@cedefop.gr](mailto:info@cedefop.gr)

The Centre was established by Regulation (EEC) No 337/75  
of the Council of the European Communities, last amended  
by Council Regulation (EC) No 251/95 of 6 February 1995  
and Council Regulation (EC) No 354/95 of 20 February 1995.

A great deal of additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server (<http://europa.eu.int>)

Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 1996

ISBN 92-827-8404-5

© ECSC-EC-EAEC, Brussels • Luxembourg, 1996

Reproduction is authorized, except for commercial purposes, provided the source is acknowledged

*Printed in Belgium*

<b>List of Contents</b>	<b>Page</b>
Summary and main contents	3
<b>I. Management driven by the labour market</b>	<b>7</b>
1. Young people and dualisation	7
2. Recognition of experience	8
<b>II. Changes and their impact</b>	<b>11</b>
1. Less jobs in repair shops	11
2. Job diversification	13
3. Rising 'levels'	15
4. Objectives for the sector	18
<b>III. Size and network</b>	<b>19</b>
1. Large and small garages	20
2. Networks of enterprises	22
3. The situation outside of networks	24
4. Future scenarios	
Figure 1: Situation of non-network motor vehicle repair mechanics	29
<b>IV. Specific regional features</b>	<b>30</b>
1. The range of possibilities	30
2. Non-determinism	31
3. Taking action	32
<b>Charts</b>	<b>34</b>
1. Structure of enterprises by size	
2. Structure of jobs in the sector by age	
3. Structure of jobs by employment level	
4. Structure of jobs by qualification level	
5. The training apparatus	
6. The labour market	
<b>References</b>	<b>36</b>

## Summary and main contents

This report sets forth the principal results and the methods followed in an initiative recently set in motion to analyse and survey the prospects for employment and training in the motor vehicle repair sector (1994).

The report commences by showing that any approach to the subject of "recruitment" in a sector like this demands first of all an understanding of how labour is managed (position of young people, mobility, etc.) and an accurate idea both of the changes occurring in the sector (technologies, competition, etc.) and of the impact that these have on employment and qualifications. In our view, all these constitute a preliminary step for the purpose of preparing future decisions and negotiations. The "quantitative" and "qualitative" data are deployed to produce a **meaningful picture**, and from there to provide answers to the questions posed by the actors as to the kind of targets that will stimulate the development (with what degree of proficiency?) of vocational qualifications. Methods for us are simply tools which we utilise to **examine specific issues**.

The second part of the report deals with complementary analyses bearing on points of organisation (contrast between "big" and "small" repair shops, growing role of company networks) and regional peculiarities (influence of regional locations on business practices) in the sector. For in fact the scale and the forms of recruitment of young people vary considerably from one shop and from one geographical area to another.

Any prospective diagnosis intended as a basis on which to prepare negotiations between the sector and the public bodies involved in management of vocational training (the state, education offices, regional councils) must therefore be based upon in-depth knowledge of these different "areas" of recruitment.

As a sector undergoing change, highly fragmented in structure, distributed country-wide and engaged in the creation of a contractual relationship with the regions (signature of goal-oriented contracts), the motor vehicle repair sector illustrates very well the need to couple a global approach to specific approaches.

The setting up of a sector monitoring unit, built upon specific indicators emerging directly from this diagnostic work, is a sign that the initiative is taking root. A good example of how the procedure proposed by Cereq has been taken up can be found

at the end of the article: the sector itself, working within the framework of a goal-oriented contract concluded in the Provence Alpes Côte d'Azur Region, has come up with 24 indicators of regional peculiarities.

To elucidate and understand recruiting practice within sectors of activity is increasingly becoming a priority target for research on the relationship between training and employment. The difficulties attaching to entry of young people into working life place the subject of recruitment at the top of the agenda for the bodies involved in managing that relationship. The public authorities— the State, and so far the regional councils — encourage sectors and enterprises to forecast their "requirements" in terms of labour and qualifications and to give a clear account of these for the guidance and effective orientation of the training system. Professional organisations in the sector likewise strive to adapt the system better to the needs and practices of enterprises and thus base their intake on the forward requirements specified by enterprises. This concern is all the more acute where these organisations estimate that difficulties may be encountered in renewing qualified staff in certain occupations and/or they are involved in the running of training initiatives like alternance integration contracts.

The issue of recruitment is of concern today to motor vehicle sales and repairs as an occupational branch. Within the framework of its national commitments, the branch has launched enthusiastically on a policy aimed at improving occupational training (Gautier-Moulin, coord., 1993); this drive places special emphasis on development of level IV and III training (rapid growth of influx of vocational school leaving-certificate holders to motor vehicle maintenance and introduction of vocational qualification certificates). Against a background of general decentralisation, the sector has also initiated contacts and negotiations with several regions for the purpose of concluding "goal-oriented contracts"<sup>1</sup> (box 1). The purpose of these contracts is, in partnership with the regions, to set targets for development of vocational training. Implicit in these agreements is an understanding and anticipation of future qualification requirements in the sector within a regional context.

**Their problem is, then, how to produce elements for diagnosis of the recruiting practices of enterprises which will be of help in deciding, justifying and negotiating corrective and/or anticipatory action at both sector and regional levels.**

It should be said that understanding and anticipation of recruitment is no simple matter, and sectors will not necessarily be experienced in this respect. We are

---

<sup>1</sup> This was the subject of a joint national agreement in October 1992, as a result of which the sector mandated the ANFA to negotiate and sign contracts with the regions.

familiar with the difficulties attendant on classic predictive approaches: that they deal either with a sector as a whole (with the help of econometric models) or with a sample of enterprises (by means of questionnaire- or interview-based surveys). It is not yet possible to match training output exactly with employment "requirements" as they are stated, reinterpreted or forecast (Tanguy, dir., 1986). Moreover, attempts to give employment forecasts in figures tend to be precarious in sectors like motor vehicle repairs which are particularly sensitive to economic fluctuations and are predominantly composed of SMEs. Monographic approaches to the recruiting procedures and methods of enterprises, on the other hand, provide useful information on the conditions determining the relationship between supply and demand in given economic circumstances and given the presence of a majority of SMEs – and again they provide useful information on the relationship between labour supply and demand and modes of intake of new employees<sup>2</sup>. These approaches do however tend to be operationally-oriented and ignore the considerations that inform choices and modes of recruitment.

---

**Box 1: Goal-oriented contracts: a novel instrument in the service of training/employment**

Goal-oriented contracts were introduced by Act of 23 July 1987 and their modes of application are defined by Decree of 14 January 1993 (no.93-51). Under a goal-oriented contract, entered into for a period of three to five years by the State, the Region and one or more professional organisations belonging to a branch of activity, the parties set certain *"targets for development of alternating apprenticeship and vocational or technological instruction, in coordination with other avenues of vocational training and instruction"*. Based on the principle of dialogue, the contract lays down guidelines as to numbers to be included in each type and level of training, location and duration of training, information to be conveyed to young people and families, ancillary training to be arranged, measures to be set up to accompany alternating arrangements, etc. The legislation provides that goal-oriented contracts shall be linked to "regional plans for the development of vocational training for young people", drawn up by the regional councils and instituted under the five-year employment act.

---

Any analysis intended to set the subject of recruitment in a more strategic and forward-looking perspective (box 2) must be "complex" in so far as it must identify and relate the chief characteristics of and changes in the sector in terms of human resources management. Indeed, **one cannot interpret or foresee the future of recruiting practices as divorced from their place in strategies and modes of labour management.**

The diagnosis proposed here, following strictly in the tradition of applied economics, is based upon a characterisation of labour management as it is predominantly and structurally practised in the sector and in the mutated forms that it can adopt in response to technical-economic changes. Recruitment is analysed from the dual standpoint of regular practices (durability of labour management

---

<sup>2</sup> These approaches focus on the "qualitative" elements of recruitment – ie, on the management tools used to ensure that *"the new recruit is suited to the vacancy"*: objective job description, identification of target profile, search for the most suitable candidate and procedures for integration into the company ( Peretti, 1987).



forms and basic hypotheses underlying these) and dynamic forces tending to change them (progressive transformation of job and qualification requirements in response to evolution of trades). From the sector's point of view, this is a promising approach in that it identifies the training challenges which ought to be prioritised and addressed throughout the national territory.

However, a global approach alone will not suffice. **In order to achieve a good understanding of manpower and qualification requirements, one must be prepared to take a close look at situations in individual enterprises and locally so as to allow for the wide range of different forms that the training-employment relationship takes.** The contingencies and contexts of enterprises and geographical areas demand diagnostics which bear more closely on the local "terrain" and on actual practice. The trends and the nature of problems arising in human resources management increasingly differ according to the contexts of enterprises, and a more geographically specific approach is justified not only because it is specified as part of the preparation for goal-oriented contracts, but also on the basis of the characteristics of the sector: distribution of employment throughout the regions, strong craft base, access to a large body of young manpower still at the stage of entry to working life, distribution of training supply throughout France, etc. And in fact it is just such a structured analysis ("global"- "organisations"- "local dimension") that this article proposes.

It is only by considering and applying such specific factors that diagnostics becomes useful as a tool for prospecting (capacity to conceive and differentiate relevant scenarios) and for helping to make decisions and propose courses of action (negotiations within the sector and with public authorities).

---

#### **Box 2: Multi-source survey and regional applications**

The motor vehicle repair branch has initiated negotiations with several regions with a view to concluding goal-oriented contracts. The object: to build up the kind of training supply that best matches the needs of enterprises in each region, but within a nationwide frame of reference. These negotiations address two sets of issues: those relating to initial training (schools, apprenticeship), and those relating to alternating training (qualification and adaptation contracts). They also address strategic concerns which transcend the basic logic of goal-oriented contracts. The first set of issues concerns the recurring problem of how to regulate the flow of trainees. The truth is that the sector needs to train five youths to have a chance of holding on to at least one. And yet, is it really such a good idea to try and break away from this kind of "disproportionate" approach? The second set of issues concerns the development of level IV and III training, bearing in mind that it is traditionally level V training that sets structures of occupational identity. Do technical-economic changes justify an explosion in throughput at these training levels? And again, how are levels V and VI to be fitted in?

In order to assist the sector, Céreq (Bieganski et al., 1994a&b) prepared a **research-action initiative** to gather and process all information of possible use for diagnosis. A **"multi-source"** approach was adopted, based on three poles of information: evolution of employment and employment structures, on the basis of the available statistics (censuses, employment surveys, computer index of trades, etc.); changes in job content, through interviews with heads of enterprises and training establishments; initial and continuous training practices (interviews, data from National Education and Céreq, 24/83 statements, etc.). This collection of data was drawn upon to identify the main developments in the sector in terms of employment and qualifications and the training issues that the sector will have

**BEST COPY AVAILABLE**

to face in the years to come. The aim of the survey in this connection was not to forecast or quantify needs: its purpose was to envisage possible future developments on the basis of qualitative, multi-dimensional analyses allowing for new departures and changes (de Jouvenel, 1993), and to facilitate negotiations both within the sector and with the parties to goal-oriented contracts. And finally, the initiative has also served to **equip and assist the sector**, by providing tools to help in decision-making, transferring of knowledge and instruments and negotiating with the regions.

The initiative specifically pursues two mutually complementary ends. In the first place to produce a **common culture**, founded on an analysis of the sector nationwide. Intended to encourage "strategic" thinking within the sector, this initiative draws on the fact that motor vehicle repair is an activity carried on throughout France. A body of information embracing the whole of the country is clearly a practical objective; indeed, it is because of the need to create such a common culture that the sector now seeks to centralise the negotiation of goal-oriented contracts through the ANFA (National Association for Adult Training). This negotiation process has been the subject of a study report (Biéganski et al., 1994a).

The second objective has been to enter into negotiations with a number of regions. The aim of these was to **identify regional peculiarities in motor vehicle repairs** as a basis on which to propose "tactical" measures to these regions, suitably adapted to their specific character. While changes in the nature of jobs are applicable generally, other factors have had to be studied region by region: structure of enterprises, employment and training, characteristics of assets, number of vehicles on the road, "macro-regional" elements (degree of urbanisation, dynamics of labour market, regional and local training traditions and practices, etc.). Specific regional characteristics have been pinpointed with the help of a series of indicators bearing on sectorial variables and assessed with reference to other variables. The sixteen indicators proposed have been chosen on the basis of factors identified as relevant following analysis of the sector nationwide (appendices). The regions have been compared in accordance with their "position" on each of the indicators, as compared with the national average and with other regions. "Regional profiles" have been built up around this positioning, relative to the mean and to the minimum and maximum values determined for each indicator in every region. The purpose of using this tool has been, in the final analysis, to facilitate the progression from diagnosis to action proposals, and from there to negotiations and agreements with representatives of the regional councils and the central government, it being the task of the latter to examine the "profile" of the region concerned.

---

## **I. MANAGEMENT DRIVEN BY THE LABOUR MARKET**

Manpower levels (400,000 employed) in the motor vehicle repairs sector are typically stagnant over long periods of time. Numbers reached a peak of 418, 000 in 1970, declining gradually thereafter (-2% between 1982 and 1990), although with considerable fluctuations from year to year in response to current economic conditions. These twofold features - long-term stagnation of employment and high sensitivity to shifts in the economic situation - suggest that the problem of recruitment within the sector is being approached basically in terms of capacity for renewal (replacement of manpower losses) and adjustment (adaptation of employment levels to business needs) rather than in terms of net creation of employment. In this connection, the character of manpower management is clear: the factors that count are renewal and adjustment.

### **1. Young people and dualisation**

One of our objectives here is a global characterisation of manpower management as practised by the sector, through comparison with other sectors: commercial

services, which include motor vehicle repairs and sales, and all industrial sectors as a whole, bearing in mind the specific weight of manual workers in their workforces. In this respect, this sector belongs structurally to the group in which manpower management is “driven by the labour market” (Grando, 1983).

Outstanding feature: there is a high level of mobility among young people, both entering and leaving the sector. People aged under 25 constitute a significant fraction of the sector’s workforce at all times; in 1990, this age group accounted for 16% of jobs as against 12.8% in commercial services and 10.7% in industry (source: general population census (RGP)). Turnover is very high: employment surveys (series 1983-1991) (Box 3) show that young people constitute a higher percentage of the sector’s influx and outflow than they do of the workforce at any time. This is an important point about motor vehicle repairs: proportions overall are smaller than in commercial services and industry because of the influx and outflow (Box 3) (Figure 1).

The high level of mobility among the young - which also takes the form of movement between enterprises in the same sector - stands in contrast with the scant mobility of employees in the older age groups. The average annual turnover of under-25s is 28.7% as compared to 14.9% for all workforce categories. Setting aside economic factors, mobility among workers aged over 25 is broadly confined to persons having a good local reputation in their trade (in cases of redundancy) who set up or take over a business or else decide to move to another trade or business sector. Thus, there is a clear split in motor vehicle repairs between a pool of young, mobile, poorly-qualified workers setting out on their working careers, and a core group of more stable, well-qualified manpower.

---

#### **Box 3. Treatment of employment surveys**

The employment survey is an annual survey based on a sample of 80,000 households (1:300, taken from the population census) and must be used with considerable caution. For the purpose of sectorial surveys, it shows only general trends and is of no practical value for analysis of low-manpower sectors or surveys confined to geographical areas such as regions.

The method proposed deals with employment survey data (series 1983-1991) in summary form, taking the annual aggregates and calculating the averages. The advantage of this approach is that it highlights the salient characteristics of manpower management in the sector. Moreover, global consideration of a long series of employment surveys provides a more balanced picture than a year-by-year approach.

---

## **2. Recognition of experience**

The other structural peculiarities of the sector likewise fit in with the dual pattern of manpower management. As compared to industry and commercial services, the job

structure features a greater predominance of qualified workers (31.1% of jobs in the sector (RGP 1990)) and a considerable proportion of craftsmen (15.1%).

The skilled trades (mechanics, panelbeaters, painters, electricians) are still the main socio-occupational group in motor vehicle repairs, where there is a higher proportion of qualified workers than in industry as a whole (30.5%).

The under-25 age group is largely employed as unqualified workers (over 60%). The majority are in unstable situations mid-way between school and work and are classified in practice as unqualified. Only a fraction of these have the chance of obtaining a qualification and joining the stable core group following working practice and the grant of a certificate.

A second peculiarity is the high proportion of level V (CAP/BEP) diploma holders. This training level is the main source of manpower renewal. Workers whose highest qualification is CAP or BEP diploma are currently the most numerous in the sector (45%) (chart 4). The proportion of workers with these qualifications is no more than 26% in commercial services and 34% in industry (RGP 1990). Level V is thus by far the most important means of access to qualification for trades and crafts in the motor vehicle repair industry.

However, here more than elsewhere possession of a diploma does not guarantee access to recognition of skills and stable employment. The sector is characterised by a job structure in which qualification through experience counts above all, while a large proportion of the workforce (35%) lack formal qualifications. Whereas holders of CAP and BEP diplomas account for a high proportion of total annual outflow (37.7% on average, according to the employment surveys), 40.4% of qualified workers lack a vocational diploma (RGP 1990): most have received the required training and entered employment without obtaining an official certificate. Access to a specific qualification and the core of stable employment is basically determined by experience acquired in work and confidence instilled in an employer. What counts is not having the "level V" as such but, after the fashion of craft-type occupations, the kind of training /employment relationship typically associated with "trades" (Affichard, Combes, 1994).

This kind of relationship further manifests itself in generalised use of traditional apprenticeship arrangements (CAPs in the various occupational specialities) for intake of young workers: motor vehicle repairs is one of the sectors employing most apprentices, who account for 11% of annual intake (source: Ministry of Labour). Such a high level of apprenticeship can in fact be attributed to the accepted approach in the sector to skills acquisition, mobilisation and deployment of young people, and involvement of enterprises in their training.

Young people as a whole occupy a specific place in the sector. Their

preponderance in recruitment places motor vehicle repairs among the sectors which, according to the BTP (Moebus, 1992), play a key role in “putting young people to work” by taking in a considerable proportion of first-timers (Amat Géhin, 1987) and giving them the chance to acquire training and a first job experience.

The short time which most of them last in these jobs reflects the instability, not to say lack of satisfaction, of the “first job opportunities” offered them, and also the role of this sector in redistributing human resources to other sectors. Young people trained for a job in motor vehicle repairs are drawn to other sectors, either because they expect improved conditions in terms of pay, career opportunities or job security, or simply because they offer a first or a second chance of employment. This pattern of “leakage” is well known in the motor vehicle repair business (Céreq, 1980): rather than a “staging-post” (Campinos-Dubernet, Grando, 1984), it is more like a “pool of qualifications” (Céreq, 1980) for other sectors.

In the final analysis, the place of young people is determined by the use made of them by employers. In this respect, there is no evidence of one sole pattern. It all depends on the goals of the employer, both as regards its global approach to manpower management (adjustment of numbers, qualitative renewal of skills) and as regards the relationship into which it enters with the young person in the course of working (does the firm’s management acknowledge the experience acquired by a young person?).

The usefulness of young is twofold: they provide flexibility and selectiveness. Employed for the most part in “special modes of employment” through training and integration schemes (apprenticeship, but also training schemes for school students and job seekers, alternance integration contracts), which are widely used in the sector, young people offer firms a degree of flexibility and modest operating costs, plus the possibility of adapting workforce levels to fluctuations in demand.

But for all that they are more than a mere source of cheap labour, and their use is governed by economic logic, in that they also constitute a pool which employers can draw on to replenish their core of qualified manpower. Employers now seek to “test” and “grade” these people in working situations. The fact of having passed through one or several shops is also taken as a positive sign by certain employers: with regard to apprenticeship, for example, some employers are known to wait until young people have been trained by other - normally smaller - employers before taking them on (Bordigoni, 1993).

\*\*\*

It is clear, then, that no practical approach to recruitment of young people can ignore their particular place in human resources management in the sector. It is essential that this be understood in order to arrive at a diagnosis, for what it reveals



is a set of practices which are deeply rooted in the sector and which ought to be absorbed into the training policy of this branch of the industry.

In fact this demonstrates that entry to the sector cannot be seen as ensuing from or leading up to a "firm" and durable offer of work. It also demonstrates the inadequacy of the kind of "fine-tuning" approach that seeks straight adjustment of trainee flows to the sector's requirements for renewal. If there is no modification to the dualised functioning of labour management and to the mode of selecting young people in a position to work, a substantial decrease in throughput of trainees at level V (an issue addressed by the sector: box 2) would only destabilise most enterprises. And again, having regard to the development of "higher"-level training (another concern of the sector: *ibid*), analysis of the structural characteristics of the sector shows that such development can best be structured to fit in with existing training types and what they mean in terms of modes of access to qualifications.

## II. CHANGES AND THEIR IMPACT

At the same time the sector is faced with major changes which tend to destabilise motor vehicle maintenance trades. There are technological changes – on-board electronics are in constant development and now affect all market segments, while new electronic and computerised maintenance and diagnostic devices come directly into use in garages as they are perfected. And there are economic changes, as competition intensifies and diversifies. Rapidly expanding new units ("neo-specialists" in rapid repairs and car service centres) are making a niche for themselves in straightforward routine jobs (exhaust pipes, tyres, etc.) and distribution of spares and accessories. Customers are becoming increasingly demanding and potentially less loyal to a single garage or make (Delage, Jacob, 1993). Also, to what extent do these changes influence manpower and qualification requirements of repair shops? What alterations in qualification and recruitment practices will arise as a result of them?

### 1. Less jobs in repair shops

The issue here is the impact of change on the evolution of employment in quantitative and qualitative terms. The point of interest is the jobs actually existing in repair shops. Surveys conducted in companies have shown that in fact it is the maintenance trades that bear the brunt of change and are the first to feel the effects; changes in manpower requirements and job content are still the greatest burden and potential source of uncertainty for the vocational training system.

For some time now we have been witnessing **an effective decrease in jobs in repair shops** – by these we mean jobs as workmen, supervisors and technicians.

While still the most numerous categories (65% of employees in 1990), their relative proportion dropped 4% between 1982 and 1990 (RGP). Given the importance of the absolute numbers involved, this represents a considerable alteration in job structure (table 2). These numbers have been lost to jobs standing in a "tertiary" or "peripheral" relationship to repair shops as such (managerial, administrative and commercial staff), which have increased substantially (+11%), and reflect a relative shift in manpower requirements as regards manpower and qualifications.

This drop in repair-shop jobs is directly related to technological evolution in motor vehicles and all that this entails in terms of rationalisation in the after-sales part. The and result of this is falling numbers of repair orders and man-hours, accompanied by a substantial and constant improvement in productivity. With on-board electronics, vehicles are increasingly more reliable and less likely to break down and need repairs. The application of new maintenance methods augments productivity by cutting down job times. A large part of diagnostics and tuning is becoming automated and the time taken by investigation and location of faults is being reduced. Then added to that we have a decisive improvement in the "repairability" of vehicles, the results of research incorporated by the makers at the design and manufacture stages - thus, as standard replacement of engines and components develops, labour costs grow relatively smaller. Given that such technological innovations will continue to develop in the years to come, we may expect a drive to reduce repair shop workforces and a consequent decline in demand for labour.

All labour categories are not affected equally. The number of workers aged under 25, mostly employed in repair shops, has been declining sharply (-34%). Their strength as a proportion of the workforce dropped from 24.5% in 1982 to 16.4% in 1990 (RGP). The substantial reduction in employment of young people is similar to that found in other sectors of the economy (Elbaum, Marchand, 1993) but is more pronounced in motor vehicle repairs in view of the central role played by this branch in adjusting employment (cf. supra). This does not, however, threaten the dualised structure of manpower management; to the contrary, this tendency goes hand-in-hand with increased stability of older workers - in fact the general trend towards reduced employment places added constraints on the mobility of tradesmen, which was already limited structurally (cf. supra).

Moreover, we also find some forms of unstable employment for young people being maintained, or even on the increase in relative terms. True, recruitment of young people is gradually decreasing, but their relative weight is growing in intermediate, unstable types of employment: for instance apprentices accounted for 82% of workers aged under 25 in 1990, as compared to 62% in 1982 (RGP). In fact it is the acquisition of qualifications and penetration of the stable core group that is becoming more and more difficult for young people, with increasingly strict

selection and a prolonged training period. The result, as in many other sectors, is a decline in recruitment of new workers and a tendency for the workforce to age (chart 2).

Again, the retrenchment in employment does not affect categories within shops uniformly. Numbers of qualified workers are falling considerably and numbers of unqualified workers stagnate, while we find a substantial increase (if limited in absolute terms) in numbers of shop supervisors and technicians (chart 3).

The "depreciation" in the position of worker qualification stands in contrast to the routine discourse and predictions as to the "necessity" of developing worker qualification, and likewise contrasts with the rise in rates of qualification generally registered for manual occupations. In any event, the group chiefly affected are mechanics, who have been the hardest hit by technological progress. Thus, the relative strength of qualified motor mechanics dropped considerably between 1982 and 1990 (-8.4%), whereas that of qualified car bodymakers grew (+5%). The impact of technological change on manpower requirements, then, varies according to the trade.

The rise in numbers of supervisors and technicians reflects a process of reinforcement of the managerial and technical ranks. At present there is on average one supervisor or technician for every ten workers; this growing proportion is progressively eroding the predominant position of the skilled worker and is a sign of the growing rate of direct intake at supervisory levels in the work organisations of the different shops.

And finally, jobs as unskilled workers are becoming less and less a case of starting new and learning the ropes. With a substantial decline in numbers of unqualified workers aged under 25, the relative weight of those over 25 has increased significantly – from 45.3% in 1982 to 63% in 1990 (11,000 people more). This apparent "dequalification" of workers probably arises from widespread "downgrading" of new intake: after all, over 40% of unskilled workers possessed at least a level V diploma in 1990. This is perhaps also the sign of a more deep-going change in job contents and forms of work organisation which had not hitherto prompted any systematic need for high qualifications.

## **2. Job diversification**

Statistical studies reveal **a tendency for jobs and qualification requirements to diversify** in repair shops, in response to technical-economic change. Analysis of the evolution of job contents and work situations both confirms and reinforces this finding.



Technological evolution demands the development of new skills and knowledge in electronics – an activity may be described as "mechatronic" (ITB, 1993) – but it will not necessarily increase the complexity of job contents in all jobs or for all persons. With the development of standard replacement, tasks are becoming simpler and more standardised. Diagnosis, control and tuning are likewise becoming more simplified, as most such tasks are now carried out "automatically" with the help of machines and standard software. Thus, basic skills are undergoing "computer-assisted social [re]construction"<sup>3</sup> and are increasingly passing to these machines, while knowledge becomes more and more often external to the person. Increased complexity – involving recourse to heuristic-type diagnostic processes – only affects certain operations, for which there is no planned and preconceived approach (eg, when a new vehicle comes out) or which involve several interdependent elements of the vehicle.

At the same time, with stiffening competition the "service" and "quality" aspects intervening in the work process are acquiring increasing importance, resulting in greater stress on the "relational" conduct and skills of personnel. The demands arising from these new aspects differ of course according to the occupational situation and functions of the persons concerned. There is a big difference, for example, between receiving a customer and advising him. The problems of skills acquisition, then, differ according to the particular job.

Unlike coachbuilding and painting trades, mechanical trades are deeply affected by the trend towards diversification, to the extent that any discussion of these is meaningless if it ignores the job contents and skills entailed. On the one hand, jobs as "motor vehicle maintenance technicians" evolve in tune with change – employees of this description are required to carry out the higher-level tasks in the shop ("complex" diagnosis, organisation/management of work, internal and external dissemination of technical information, advice to customers, etc.). On the other hand, workmen are kept on but their job content changes: whether specialising in rapid repair units or working as all-purpose mechanics in traditional repair shops, they undertake tasks which have become simplified by technological development (changing parts, servicing, etc.). We would therefore appear to be witnessing a **process of "overqualification/ dequalification"** similar to that which took place in the motor industry in the 1960s and 1970s (Freyssenet, 1979). In between these two extremes, there continue to be traditional "professional" jobs, involving such restoration work as is still carried on, such as reconditioning of second-hand vehicles (discontinued lines) for resale.

Side-by-side with this job diversification, there is an **increasing division of labour** and a division of the knowledge and skills on which this is based. It remains to be

---

<sup>3</sup> Expression coined by Stroobants, 1993.

seen how enterprises will respond to this phenomenon in terms of defining occupational niches and of their human resources management and recruiting practices: Will there be differentiation of modes of intake in the sector? Will bridges be maintained between the two poles in jobs and in qualifications, or will there be a complete separation of the two and increasing polarisation of practices?

### 3. Rising 'levels'?

The changes in the sector finally pose the **problem of the outlook for qualification and recruitment practices**. Are garages altering their practices by taking on young people emerging from the new "higher" level training schemes – in the language of the Profession, level IV (vocational school-leaving certificate, CQP [Certificate of vocational qualification], BP) and level II (BTS [Advanced technician's diploma])? When they come to renew their manpower, will they restructure the traditional job patterns, based on level V training, with all that this entails in terms of access to qualification and recognition? As in other sectors, will priority in recruitment progressively favour what is considered to be a higher "level"?

With the development of jobs as shop supervisors and technicians, these questions are relevant today. How will these new jobs actually be filled? By internal or external recruitment of experienced tradesmen, with training-up of existing manpower and maintenance of an avenue of promotion? Or by external recruitment of youngsters holding a level IV or III diploma, arranging direct access to jobs and responsibility for the best-qualified and destroying the normal avenues of promotion? The tension between these two modes of manpower supply lies at the heart of the employment dilemma facing many enterprises. The fact remains that the general issue of recruitment needs to be addressed separately from the examination of actual work situations within organisations, as there is *a priori* no link between jobs and training "levels". Hiring policies of enterprises can themselves frequently be analysed in isolation from actual changes in job content, as a result of the difficulties enterprises have in identifying their "requirements" in terms of qualifications, and their "natural" tendency to select on the basis of academic level.

Statistics show that manpower renewal requirements are **increasingly being met through intake of holders of a "higher" level diploma** as understood by the sector. The growth rate in the proportion of holders of this kind of qualification among sector employees has been quite remarkable: +34.8% between 1982 and 1990 (RGP). The bulk of this increase to date has, however, been in administrative, financial and commercial posts, motor maintenance trades being relatively unaffected. More than half of management staff, almost one third of "middle-rank" commercial and administrative staff and a quarter of administrative employees in

the sector possess a "higher" level diploma, whereas this is true of only 3% of manual workers and 14% of supervisors and technicians. While a niche appears to be emerging for the "higher" level in this last category, training-up and intake of workers in repair shop trades still draws largely on people with level V training (especially for apprenticeship). The situation as regards these trades remains fluid and uncertain: the question of intake channels at the "higher" level is perceived as at once "newer" — in that it involves a vocational training supply currently in the process of restructuring — and more "complex" — in that it demands rethinking of approaches to qualification, recruitment and promotion rooted in long practice.

We need not be surprised to find that there are growing numbers of new repair shop employees holding a "higher" level diploma. The working population in general is better qualified (Fournier, 1993), and this reflects on intake as a whole. Moreover, the aspirations of young people and their families mean that more years tend to be spent in education; a diploma is perceived as a condition for access to steady employment, and the school-leaving certificate the minimum qualification. The announcement of a target of "80% of an age-group with the school-leaving certificate" most certainly acts as a powerful spur to individual aspirations. All at once — and this phenomenon is not confined to motor vehicle repair trades — the conventional short-duration vocational training schemes (CAP [Certificate of vocational aptitude], BEP [Diploma of occupational studies]) have become devalued. Enterprises employing young people who are in training or have completed training under these schemes frequently receive the impression that what they are getting are the "cast-offs" of the education system, the "other 20%", who have been "oriented" towards motor vehicle repair trades. These tend to be seen *a priori* as "lacking sufficient education" and "insufficiently motivated" to adapt to change and learn the trade. Thus, as a result of the anxiety that technological changes<sup>4</sup> can inspire and of the growing emphasis on conduct both in the shop and vis-à-vis the customer, heads of enterprises can often be heard to identify their needs for the coming years in terms of "higher" qualifications and hence "better-trained" workforces. All these indications suggest that there is likely to be an increase in recruitment and intake of young people with "higher" level training in the sector.

**There is therefore little likelihood of any rapid change in the predominant approach to recruitment among enterprises.** The option of generally recruiting young people with "higher" level training would involve a drastic change which all enterprises are probably not prepared to contemplate — a total transformation in the rules of workforce management and the approach to qualifications. The question then lies in whether the sector has the capacity to generate and impose a category

---

<sup>4</sup> Introduced by vehicle builders. Repair businesses have no control over changes and rates of development.

of professional technicians or something close to it — that is, repair shop technicians. Assuming that the intake of young people abides by the rules laid down in collective agreements<sup>5</sup>, the consequences of generalised recruitment for human resources management practice as a whole are not hard to imagine: escalating wage bills and revision of pay and promotion scales.

However, there is also a question of "culture" and legitimacy. In a sector where training-recruitment practice favours acquired work experience and CAP holders trained through apprenticeship (see above), it is debatable whether the new "higher" level training forms will become rapidly accepted everywhere. A rise in the "level" of the diploma such as the training system proposes is not necessarily what employers are looking for in order to acquire or renew the skills which they think they require<sup>6</sup>. This will not exempt young people from being "put to the test", in the course of which they must seek to earn the confidence and acknowledgement of the employer. Moreover, legitimacy has to be established vis-à-vis the existing workforce, particularly as such a mode of entry may be in breach of conventional qualification and promotion rules still in force. Finally, there is no disregarding the pressure on enterprises to take part in the training of young people at vocational school-leaving certificate or advanced technician's diploma level, for example through "tutoring" and cooperation with training establishments. The same can be said of investment in new "references" and in practices which cannot readily be introduced all at once or everywhere<sup>7</sup>.

The issues involved in recruitment of people with "higher" level training therefore transcend the narrow boundaries of traditional problems of choice and incorporation to the organisation. This means that garages must alter their management and reference system. For this very basic reason there is a good chance that the window for acceptance and professionalisation of "higher" level entrants will remain narrow in the years to come. At any rate the new jobs emerging for technicians and shop supervisors do not seem fitted to the creation of such a window. Although direct or quasi-direct access may be possible with "higher" level vocational training, enterprises admit that in part at least, they still resort to promotion through the ranks to fill newly emerging or developing jobs.

---

<sup>5</sup> Holders of a "qualification" recognised as level IV by the sector should automatically be assigned the category of well-qualified workers, rising swiftly from there to that of highly-qualified workers and shop technicians before becoming supervisors in an ideally short space of time. Holders of a recognised BTS [Advanced Technician Diploma] should enter directly at supervisor level.

<sup>6</sup> Business managers may sometimes be heard to say that they require more "leading edge" skills, but this does not necessarily mean systematic recruitment of young people with "higher" level training.

<sup>7</sup> The problem that vocational secondary schools admit to having in finding training places for students in their vocational school-leaving certificate sections, and the reluctance of certain Apprentice Training Centres to invest in "higher" level courses place the onus of making this kind of "cultural" investment on the employers.

#### 4. Objectives for the sector

As well as identifying the structural characteristics of workforce management as practised in the sector, analysis of the changes occurring and the way these relate to requirements in terms of jobs and qualifications is of interest in that it sets the diagnosis in a dynamic perspective, making it possible to pinpoint key problems in matters of training.

The trend towards diversification of jobs and trades prompts the question of what ways of building up and adapting skills ought to be encouraged. Such consideration should be flexible enough to take into account a growing differentiation in modes of access to the kind of qualifications that enterprises recognise and demand. It is also a good reason for the sector to undertake a series of "monographic employment surveys" embracing groups of organisations.

The development of "higher" level training (especially vocational school-leaving certificate) needs to be brought under stricter control. The problem that arises is one of training flow, given that such courses are in rapid expansion while job intake volume remains limited, and again the training schemes concerned are not generally known or recognised. Looked at in another way, the training system – particularly the vocational secondary schools – would appear to be getting too far ahead of the employment system. Moreover, level V training continues to make sense for training up of workers. Renewal of skilled manpower, especially in bodywork and painting trades, is still largely carried on through conventional apprenticeship schemes. It therefore follows that priority must be given to the "quality" of level V training to ensure that it continues to be acceptable in the eyes of employers and provides a means of access to "higher" level training. Improvement of the continuous training supply and its inclusion in the discussion of initial training are two more issues that need to be addressed against the background of an ageing permanent workforce and considerable pressure for level V entry.

Discussion of these issues should not however be confined to sectorial level; it is also relevant to individual organisations, which demand properly adapted and differentiated responses. On this level, diagnosis should become more "local", going deeper than is possible through a strictly global approach. This means **looking more closely at the areas in which recruitment takes place and where the decision to recruit is made** – that is, at individual organisations, given the increasing disparity among the policies and practices followed by employers, and at geographical locations, given that the situation and quality of training supply differs from one area to another.



### III. SIZE AND NETWORK

By taking into account the individual contexts of employers, we can arrive at a more precise knowledge and understanding of recruiting practices: **the problems posed by changes do not affect all enterprises in the same way and demand individualised responses in terms of training.**

In a highly atomised sector like this, there is a great deal of disparity: 400,000 jobs are distributed among 68,000 enterprises, all of differing size, legal status and speciality. All employers are not subject to the same constraints and do not have the same resources to draw on. There is wide variety in terms of types of activity and structure, modes of strategic positioning and movement in terms of "service markets", and states of economic health. What points are shared in common by distributors or dealers working with one or more makes, "independent" repair shops, service stations, auto-centres, rapid repair neo-specialists, etc., other than being organisations that operate in the motor vehicle repair market<sup>8</sup>? Quite clearly, models of work organisation and human resources management practice are characterised by their diversity, and this is a factor which cannot be ignored. Here, there is more to be gained in analytical and operational terms from examination of specific features than from adopting a "global" approach to the sector.

Diversification of competition, moreover, simply reinforces this heterogeneousness. **The variety is all the greater if we look at the manifold ways in which enterprises interpret changes in their environment and the diversity of their responses and expectations.** Technological changes may revolutionise job contents and work organisation in one enterprise but have far less dramatic effects on another: depending on what room for manoeuvre a business has, such changes may present an opportunity for investment and expansion of market share, or they may prompt enterprises to reposition themselves or diversify.

---

<sup>8</sup> The NAP (nomenclature of occupations) does not distinguish types of business, and there is no statistical source giving their precise workforce numbers. NAP 600 does however identify four "subsectors" engaging in motor vehicle repairs and sales (code APE 65, NAP 100): retail trade in motor vehicle accessories and equipment (code APE 6501), embracing distributors of detached parts; retail trade in fuels and lubricants (6502), which groups service stations; sale and repair of motor vehicles (6503), embracing branches, distributors, some dealers, and second-hand motor vehicle dealers, many linked to a repair shop; repair of motor vehicles (6506), encompassing other dealers, "independent" motor vehicle repair mechanics, bodymakers and specialists in auto electrics. In dynamic terms there has been a decline in employment in subsectors 6502 (-21.9% between 1982 and 1990) and 6506 (-22.5%), and a contrasting increase in subsectors 6501 (+60.8%) and 6503 (+16.5%); there are, then, activities in decline (sale of fuel, "straight" repairs) and activities in expansion (sales, in some cases linked to repair activities). It should be noted that subsectors 6503 and 6506, which is where motor vehicle maintenance trades are largely to be found, alone account for over 87% of the entire workforce in the sector and hence are the source of its main distinguishing features.

What criteria can we apply in order to determine which organisational differences are most significant and most relevant to the functioning of the sector?

## 1. Large and small garages

Size (box 4) is a classic factor of structural diversity, with important consequences for motor vehicle repairs in view of the characteristics of the sector and the changes it is undergoing. Problems of employment, qualifications and recruitment assume different forms depending on the size of the garage.

---

### Box 4: The "size" factor

To deal with methodological difficulties, size limits have been set: beyond what workforce size is a garage classed as large? And the reverse for small garages. The threshold defined is, of course, always approximate, but we shall distinguish between enterprises with less than 20 employees and enterprises with 20 or more employees. The use of statistics – here, taken from the UNEDIC and the EAE [annual company survey] – makes such a clear-cut threshold division advisable. Moreover, the 20-employee threshold is the one used by the INSEE [National Institute for Statistics and Economic Studies] to identify and survey small commercial and service firms (Savoye, 1992). This distribution is further justified by the make-up of the sector: of 68,000 enterprises with or without employees in 1990, 96% had less than 20 employees, but 42.3% of the total workforce were employed in the remaining 4% according to the annual company survey (EAE) (INSEE Résultats, 1992). Finally, in the interests of teaching standards and preparation of proposals for training initiatives, at least for an initial period the diagnosis would be best to focus on a contrast between the situation and practices of small garages (particularly craft establishments) and those of large garages (particularly major distributors or branches).

---

The distinction between large and small garages is justified with regard to the evolution of employment. Leaving aside sporadic fluctuations, employment has not evolved in the same way for either group. **Over the long term, the trend appears to favour small enterprises.** While total salaried employment has remained virtually stable (-0.2% mean annual growth from 1981 to 1992), salaried employment in small establishments has increased substantially (+12% over the same period) and has decreased significantly in large establishments<sup>9</sup> (-16%) (Unedic). There is therefore a trend towards structural redistribution of employment in favour of small units (graph 3)<sup>10</sup>. Growth in establishments with 5 to 9 employees is considerable, declining numbers particularly affecting those with over 50 employees. This means that the motor vehicle repair sector is set to remain

---

<sup>9</sup> In this sector, establishment is frequently confused with enterprise.

<sup>10</sup> A recent study (Sivan, Aguetant, 1994) drawing on the annual Unedic statistics since 1986 (the year when workforce strength in the sector was at its lowest) shows that this redistribution was already a fact by the second half of the 1980s. It transpires from this study that since then, employee numbers have risen in establishments with 20 to 49 employees. At the same time it confirms the fall in numbers in establishments with 50 employees and over and, at the opposite extreme, an increase in small establishments, essentially those with between 5 and 19 employees.

highly atomised, with no signs of concentration to come. Craft establishments have held up so far, with numbers virtually unchanged and still considerable (61,000 in 1990 [GPC- General Population Census]), distributed among a number of units (56,000) which has remained stable since 1987 (APCM, 1993). As a criterion, however, size alone is not enough.

The fact that the evolution of employment (and hence potential new hirings) globally is negative for large garages does not by any means signify that their economic performance has declined. Large garages – 140,000 employees in 3,300 establishments (Unedic), in most cases combining motor vehicle sales and repairs – have in fact improved their market shares to the detriment of smaller businesses; between 1983 and 1988 they increased their market share by eight points and controlled 70% of the market in motor vehicle maintenance and repairs (Savoye, 1992). With greater financial resources at their disposal, they undertake major investment in new maintenance technologies and work rationalisation. As a result, their improvements in productivity are greater and their workforces shrink faster than elsewhere. Again, the tendency for jobs and trades to diversify is greater here. As a result of the heavy investment undertaken and the increasing division of labour that goes with it, it is in the large garages that changes in the structure of jobs and qualifications are most pronounced. Our visits to these enterprises revealed a tendency for work organisation in teams to become polarised between skilled or general-purpose tradesmen on the one hand, and on the other, growing numbers of supervisors and shop technicians placed above them. With such growth of intermediate positions in repair shops, it would appear to be in the large garages that requirements for the new qualifications are most appreciable and first emerge, and where **the issue of a potential window of entry for young people with "higher" level training** is most open.

Small garages – 96% of the establishments in the sector, accounting for 200,000 employees – appear at first sight to be less affected by change in terms of employment. Over the long term the dynamics of employment have proved positive on the whole and investment has been more limited. The issue of the place of "higher" level training has less relevance there, and there is in principle a more marked tendency to carry on employing level V trainees (particularly those having gone through apprenticeship), for both financial and "cultural" reasons. The question still remains, however, of whether, given lower rates of investment, it will be possible to keep up levels of employment growth and traditional training/recruitment practices indefinitely in the same terms. Moreover, there is an area of doubt which needs to be addressed: has the positive evolution of employment benefited all types of enterprise among small garages, or only some? The term "small garages" in fact covers a wide diversity of structures and situations: garages specialising in mechanics, bodywork or electrics; "general purpose" garages, some carrying on vehicle and/or fuel sales, some not; garages



attached to one or more makes; neo-specialists in rapid repairs, etc. **The problem of the economic positioning of small garages** is therefore an essential factor for an estimation of likely future developments in employment and recruitment practices.

## 2. Networks of enterprises

Any analysis of organisational peculiarities must also take into account an added dimension: **whether or not a garage belongs to a "network of enterprises"** (box 5). In theory, the development of networks ought to have an increasingly palpable influence on forms of employment. Changes in the environment and problems of skills acquisition and recruitment do not have the same impact or the same meaning for a garage belonging to a network and for one that does not. In motor vehicle repairs, we can identify several networks built around the "pivot firm" model.

---

### Box 5: The "network" factor

The term "network of enterprises" as we use it is not confined to vehicle builders' distribution and post-sales services. It refers to a **form of inter-organisational structure designed to coordinate enterprises which seek to share, procure and/or complement resources within a strategic context** as a means of creating or assuring a competitive advantage. The web of relationships binding them together is based on cooperation and is more than short-term in economic terms. Although the arrangement is not necessarily formalised in a contract (Bidault, 1993), it does as often as not have a contractual foundation, with one "pivot firm" linked to local agents who undertake production, maintenance and/or distribution on their own account (Paché, Paraponis, 1993). With the stiffening of competition, this kind of structure is proliferating over the economic scene – eg, in textiles (cf., Benetton) or transport (cf. the integrators).

---

**a) Vehicle builders' distribution and repair networks** are better known and more visible. Although varying in nature and scale, they share the fact of being based upon contracts involving commitments in terms of sales (quotas of vehicles, separate parts, etc.) or post-sales (maintenance services and standards). The pivot firm (the builder or importer) lays down the principles and the ground-rules governing organisation and operating systems, distributes these to the network as a whole and influences the way that the units of the network function. We need to distinguish between builders' "primary" and "secondary" networks. The "primary" network is composed of distributors (exclusive or otherwise) under contract to the builder and to the builder's branches and subsidiaries; following a period of strong growth, their numbers have now been stationary for a number of years (Biéganski et al., 1994a). The "secondary" network is an organisation of "agents" – generally craft establishments indirectly linked to the builder through a contract with a concessionaire. These have been in sharp decline for several years (ibid), affected by the restructuring undertaken by the leading vehicle builders.

The strategic problem facing these garages has led to the **strengthening of the influence of the builders on their modes of organisation and management**. Post-sales, for long the poor relation ignored in favour of all-important vehicle sales, today enjoys very high priority in builders' "total quality" policies. Through lengthening warranty periods, assistance agreements and so on, post-sales is itself conceived as an added sales rationale and a means of preserving a link with the customer against a highly competitive background. Vehicle builders have turned this into a basic yardstick, on a level with vehicle sales, against which they measure their network members. As a result, network garages are under pressure from builders to acquire new maintenance equipment or develop the requisite skills. One of the prime objectives is to offer the customer as comprehensive a range of services as possible<sup>11</sup>; another is to keep maintenance of their vehicles within an arena where they are in a position to monopolise the provision of diagnostic and servicing materials.

Central as network garages are to their competitive strategies, builders concern themselves closely with the skills at the command of garage personnel. Their attention focuses firstly upon the "intermediate" types of job – that is, those carried out by motor maintenance technicians. In the biggest networks (Renault, Peugeot, etc.), the builders lay down precise job definitions, which tend to be fairly homogeneous throughout the country<sup>12</sup>. These jobs are developed within models of work organisations previously defined by the builders<sup>13</sup>. The aim of the builders is generally to turn them into quality service centres whose functions include in-house training. But where they are placing most emphasis is on encouraging continuous vocational training in their networks. The builders in the strongest market position have set up training systems, programmes and infrastructure strictly reserved for related enterprises and staffs. They further seek to influence recruiting practices, promoting "higher" level vocational training and even helping devise a specific range of courses at that level – setting up of initial training schemes with *the French Ministry of Education*, CQP sections devoted entirely to the network, etc.). What builders seek from training is to build up a body of "*integrated human resources management*" practice supported by the network organisation, with all that this entails in terms of a common "culture" for workforces and transcending of the normal boundaries of the enterprise (Paché, Pol, 1992).

---

<sup>11</sup> Hence the diversification of distributors into services which were once left to specialist firms (bodywork, painting) or into those offered by the new "rapid repair" firms (thus striking back against competition from "neo-specialists" and auto centres).

<sup>12</sup> A good example of this is the function of "technical coordinator" in the Renault network.

<sup>13</sup> cf. Peugeot's "integrated shop", combining the business of customer reception with maintenance proper, and Renault's forward-looking discussions on the concept of the ideal repair shop a few years hence ("garage 2000).

b) **Other emerging networks of enterprises have grown in the last few years** in terms of market share and employment. These have served at once to diversify and stiffen the competition. Specialising in distribution of spares and accessories or in a repair niche, they are headed by a services company, a major distributor or a maker of equipment or products for motor vehicles. The **"neo-specialists" in rapid repairs**, for example, have enjoyed a spectacular boom. Their outstanding features are: good value for money, an easily-recognisable "style", quality of reception and long opening hours. In a structure of this kind, there is extreme rationalisation of methods and procedures; the accent is placed on conduct at work and the men are required to meet a very high turnover in a specialised task. This is a major departure from the traditional image of mechanical and coachbuilding tradesmen.

### **3. The situation outside the networks**

Lastly we have the "independent" shops, the "non-network" shops, which are the farthest removed from network forms – motor vehicle repair mechanics, motor vehicle electricians and bodymakers. Such shops can indeed maintain comradely and cooperative links with one another (exchange of information, tips and tricks of the trade, subcontracting, etc.), but these tend to be too informal, unorganised and unstable, entirely dependent as they are upon the state and flow of inter-personal relationships<sup>14</sup>.

Today, independent businesses are under threat from the **growing "network logic" in the sector** – ie, membership of a network of enterprises is increasingly perceived as a competitive advantage. As customers become more demanding and less and less loyal to any one garage or make, as the rate of technological change quickens, and as competition diversifies and stiffens in a stagnating repair market, the pressure is on enterprises to procure resources of a kind which are more readily accessible or deployable within a network structure. Such a structure can offer: a brand image which is not only known locally; a coherent and clearly stated strategic position; adequate structures and means to enable shop personnel to acquire the skills considered necessary today, and so on. In fact there are numerous sectorial studies predicting a decline in the number of "independent" craft units. One such study, for example, went so far as to forecast that one in three or four independent garages would close down from 1995 to the year 2000 (Chambre des métiers de l'Ain, 1990).

---

<sup>14</sup> These are in fact purely personal networks and not networks of enterprises. The latter exist independently of the persons carrying on the transactions (Bidault, 1993). We might add that they are founded upon relationships carried on with and supported by a minimum level of instrumentation, information and exchange systems, modes of control and incentives, all of which go well beyond the bounds of a strictly inter-personal framework.

#### 4. Future scenarios

Differentiation and questioning of human resources management practices, and changes in these, can best be approached by cross-hatching the factors of size and membership or otherwise of a network. This cross-hatching can provide a basis for forecasting enterprises' manpower and qualification requirements. This will give us the means with which to draw up scenarios of differentiated organisational development which should furnish the sector with material for internal debate and for elaboration of proposals for submission to its partners in the training system. Examples of this are proposals aimed at *"stimulating intuition, aiding understanding and acting effectively"* (Schwartz, 1993).

A large majority of big garages are units belonging to "primary" networks: distributors – most often exclusive, representing the leading vehicle builders in the market – and branches and subsidiaries of builders. We have already seen the strong tendency towards homogenisation of organisational and management practices in each network, under pressure from the builders. But in spite of such pressure, these practices remain to some extent indeterminate. In terms of recruitment, the capacity of the potential window for intake of young people with "higher" level training is not yet clearly measurable, and here the uncertainty lies in their **future place** in large garages. We see that membership of a network does not deprive a garage entirely of its autonomy, but we also see the doubts and uncertainties of the vehicle builders regarding organisation of work and global management of human resources (to target "strategic" categories or to work on all teams together?). We may pinpoint three scenarios (box 6); none of them can be ruled out for the years to come, but the likelihood is that one of the three will establish itself as the benchmark.

---

##### Box 6: Three scenarios for large garages

1) The first scenario, and the one found most commonly nowadays, restricts the intake of young people with "higher" level training. In this scenario, **promotional practice continues to be based on experience acquired in work situations**. Even if this practice is curtailed, level V intake continues owing to rising productivity and shrinking external mobility of personnel. At the same time, the enterprise trains and/or hires young people with "higher" level training, but only to a limited extent. It is estimated on the basis of observations at enterprises, that for every ten employees, at least one person working as a technician possesses this profile, while there are one or two more technicians promoted from workmen with level V training on the basis of work experience. In this scenario, then, experience is awarded the same importance as a diploma. In a context where new technological, relational and basic skills need to be combined, a considerable effort in terms of continuous training is required for the existing workforce. This also means that a great deal of attention must be paid to the evolution of throughput of "higher" level trainees – if this is too large or too fast, it could make access to employment difficult for the youngsters concerned, particularly as under the collective agreement, they are supposed to occupy highly-qualified posts as technicians or supervisors immediately upon entry.

2) The second scenario reflects the **classic thesis of "dequalification/overqualification"** in its most radical form. Work organisation is highly polarised. Manned by people with different profiles, the "qualified" at one extreme and the "dequalified" at the other are distinguished and kept separate for management purposes. The result is that traditional channels of worker promotion disappear and people entering the sector with the new Certificate of Vocational Aptitude (CAP) find their careers blocked. The "dequalified" group takes in manpower trained at this level, but the inflow declines (rising productivity, consignment of "old hands" to tasks that have become routine) and these jobs become insecure. The "overqualified" group is no longer supplied by training up, as enterprises set their sights on young people with "higher" level training. These are the only ones at present who have access to the most highly qualified jobs in the shop. Unlike the first scenario, the question arises here of whether the sector has the capacity to generate a sufficient supply of "higher" level training which is either recognised by vehicle builders and distributors or elaborated jointly with them. Here, young people with "higher" level training are not faced with a placement problem; there is no difficulty as regards their integration and recognition as part of teams of "dequalified" workers for whom the avenues of promotion are closed, and for whom work experience remains their chief claim to legitimacy. There does exist a promotion problem, however, in that they are immediately thrust into the most highly-qualified positions with only limited prospects of rising further thereafter. One objective in this scenario ought then to be an improvement in conditions of internal mobility.

3) The third scenario again involves a primary focus on young people with "higher" level training, but in this case the diploma is not linked to the position occupied. Such a scenario, entailing **suppression of the link between training and job**, is founded on the new kinds of training but without attaching a real value to certificates. Only young people holding a diploma or a "higher" level qualification are hired and those having only level V training are classified as lacking sufficient education for a career in motor vehicle repairs. This reflects an attitude which is currently widespread in France, whereby the tendency is to favour the highest diploma level for recruitment and to place more emphasis on the "level" than on the actual content of training, with the result that the point of selection is brought down to school level (Lichtenberger, 1993). This leads to a total divorce of training from employment, as young people taken on with "higher" level qualifications are placed in jobs normally occupied by holders of a Certificate of Vocational Aptitude (CAP) or a Diploma of Occupational Studies (BEP). Enterprises no longer abide by the terms of the collective agreement and declassify employees upon recruitment, sometimes in the guise of work/training – for example, the holder of a vocational school-leaving certificate or a Vocational Diploma (BP) may be recruited under a qualifying contract to prepare for a Certificate of Vocational Qualification (CQP). Thus, the training supply grows faster than the employment system, not only with respect to available jobs but with respect to the quality of the jobs available in terms of work, wages and promotion prospects. The danger lies in the likelihood of frustration among young people, conflict within enterprises and early flight to other occupations. The task facing enterprises is to thoroughly overhaul their work organisation. For the branch, the task is to prevent the training system from being destabilised by the kind of policy that systematically raises the minimum training level required for entry.

---

Small garages may or may not belong to networks: these are small distributors (frequently not exclusive), brand dealers, "independent" garages, neo-specialists, distributors of separate parts, etc. Here, however, we shall focus on the first three categories, since these embrace units clearly identified with the sector and represent areas of employment which ought in principle to have the most affinity for training in motor vehicle repair trades. Only these types of garage, for example, are entitled to enter into apprenticeship agreements. Having regard to the future of recruiting and qualification practices, the key issue looking forward to the year 2000 cannot be confined to a discussion of the place of "higher" level training, given that the intake window is likely to be narrower in small garages than in large ones. Aside from the financial and cultural considerations already referred to, it should be noted that 80% of maintenance and repair activity is now routine; in a small garage, this means that the volume of work is insufficient to justify hiring "overqualified" youngsters and paying them a high wage straight away (assuming that the enterprise respects the collective agreement). The question that the sector needs to pose regarding the future of employment in small garages is neither more



nor less than the strategic challenge facing them today – **that is, the viability of their positioning in the motor vehicle repair market.** On-board electronics, diagnostic procedures specific to makes and the growth of rapid repair networks and car service centres – all these developments raise the question of the place of the small garage in the sector. There are consequently two conceivable (re)positioning scenarios, not mutually exclusive, which place recruiting requirements in context (box 7).

---

**Box 7: Two scenarios for small garages**

1) The first scenario is the more probable for small establishments (essentially those with less than five employees), which are most threatened by technical-economic change and have the smallest financial resources – ie, many "independent" shops not belonging to networks, and a certain number of brand dealers which are unable or unwilling to meet the "quality" criteria imposed by vehicle builders and distributors. Such enterprises cannot invest heavily in equipment or in personnel training and therefore **seek a niche for themselves in basic routine services:** oil changes, exhaust pipes, tyres, etc. They turn to better-equipped garages for more "complex" jobs requiring specialised equipment and skills. Here, however, they come up against the rapid repair "neo-specialists" and car service centres, who are more competitive and more visible on the market. We may therefore expect to see a drop in their numbers and the amount of employment they represent. These are the garages referred to in sectorial studies which predict the disappearance of many craft establishments by the year 2000. They may however be expected to survive in some areas where competition is less fierce and/or their particular experience is still appreciated and called for – eg, in rural areas, and to a lesser extent in seaports and big-city suburbs where there is plenty of traffic and scrapyards tend to be located. In general terms, given the shrinking employment in this scenario, recruitment of young people – essentially level V intake – is in decline and tends more to maintain than to renew skills. For all these reasons, it is up to the branch to control the process of retrenchment while seeking to ensure a sufficient supply of new workers evenly spread throughout the country.

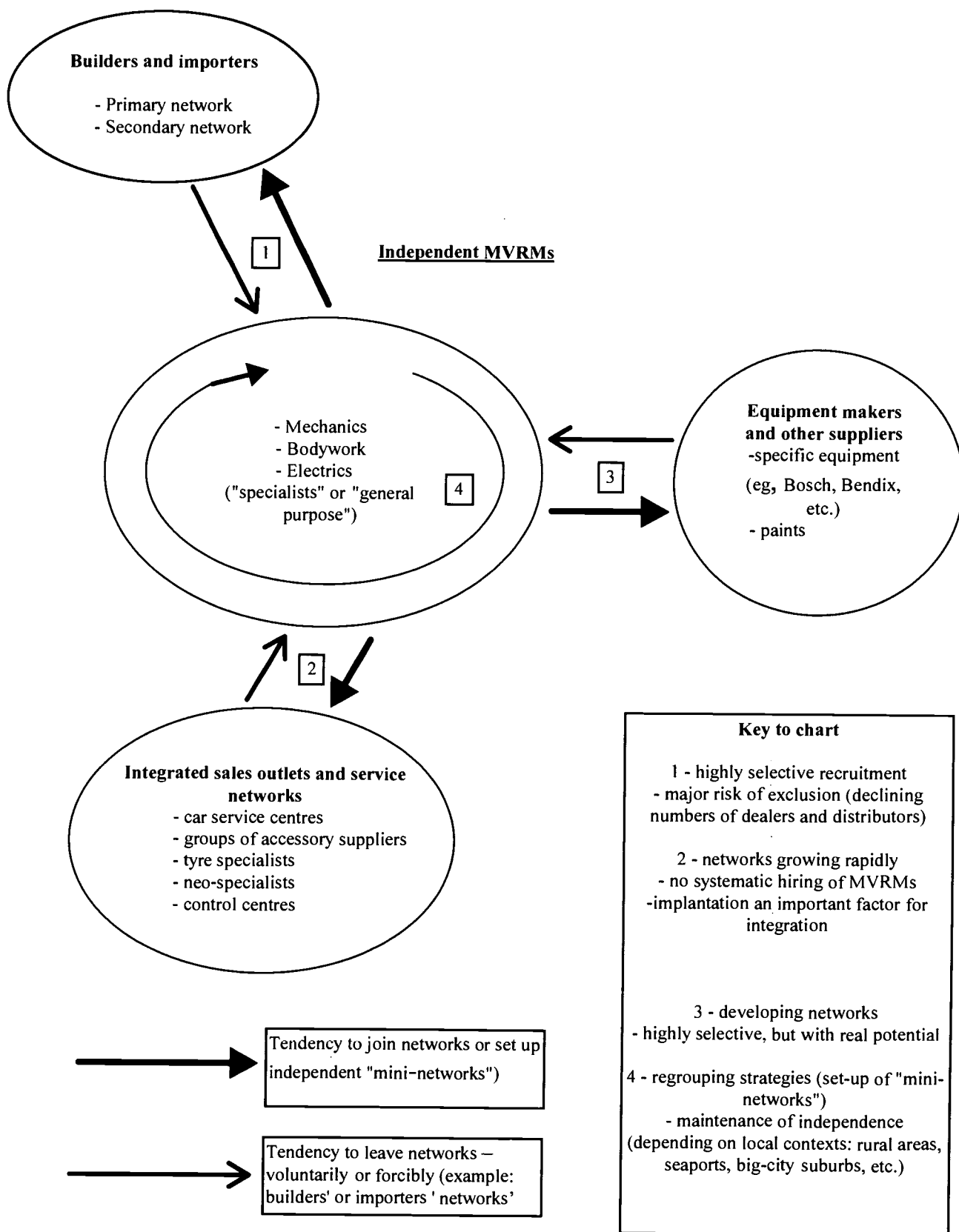
2) The second scenario involves enterprises with sufficient financial, human and organisational resources to **invest effectively in new maintenance technologies and in initial and continuous training.** The issue here is one of positioning in terms of activity, know-how and brand image in order to distinguish themselves from new competitors and absorb all or part of the more "complex" market niches (diagnosis and maintenance of vehicle electronic systems). Garages often belong to builders' networks or associated networks of suppliers of parts or equipment to the motor vehicle industry. Through these networks they have access to the kind of resources they need to secure a position for themselves – rapid access to operating procedures devised by the builders, uniform communications and specific training infrastructure and programmes. Training and recruitment of young people at level V is not challenged: unlike the case of large garages, traditional avenues for build-up and recognition of skills are accepted. There is still little room for recruitment at "higher" level, most opportunities in this respect being restricted to the kind of so-called "hyper-specialised" jobs found in networks of enterprises identifying with "complex" niches (like the Bosch network in electronic ignition), or to the kind of situation where a craft operator's son or employee is put through a training course with a view to taking charge of the business. In fact the main problem is with the kind of people who tend to undergo level V training: craft establishments increasingly feel that such people lack the "qualities" that they deem essential in order to learn the trade and develop with it, and are dubious about the possibilities of renewing skilled manpower in their enterprises. Improvement of level V training is therefore at least as important for the sector as development of a supply of "higher" level trainees.

The positioning of garages as related to the resources to which they have access demonstrates the strategic importance of belonging to a network and of being able to stay there. The first scenario illustrates the threat to small establishments which do not or cease to belong to a network. How will they be able to adapt to change? And how can the sector encourage and assist them to use more training as a means of entering the second scenario? The sector could for instance, by devising a range of training schemes for this specific purpose, assist the emergence of new networks of independent garages, built upon the usual informal, comradely links and taking the form of cooperatives or economic interest groups, federated either locally or on a trade basis.

Finally, consideration of enterprises in context shows the "impossibility" of taking only a branch view. It is important to go beyond a simple global approach to the sector – to penetrate deeper and take account of organisational specificities. Aside from a number of common traits, modes of recruitment and qualification typically vary widely depending on the places where they occur. And this disparity is intensified by accelerating change, diversification of competition and the growing structural role of the networks. Contextualisation of employment and qualification requirements assists forward analysis through the construction of scenarios which adapt to the diversity of the sector.

Hence, it is an essential methodological objective for the branch to be able to monitor trends in recruiting practices by types of enterprise and in networks. The branch ought to be in a position to invest in an information system which will make such specification possible. Besides periodic updating of qualitative surveys, there is a need for a statistical base for analysis of sector enterprises, which will distinguish their "status" and the networks they belong to and enable the numbers of any specified structure type to be counted. For the moment, there is no statistical source that provides regular, reliable information of this kind, which would in principle be extremely useful for successful adaptation of training actions.

**Figure 1: Situation of non-network Motor Vehicle Repair Mechanics**



BEST COPY AVAILABLE



#### IV. SPECIFIC REGIONAL FEATURES

Recruitment in motor vehicle repairs is still influenced by the window – or more exactly, the geographical area – in which it takes place. In other words, the "local" dimension is the second source of variation which has to be taken into account. Leaving aside individual organisational features, the practices and strategies of enterprises differ in territorial terms. Moreover, the structural characteristics of the sector lend added significance to this local dimension: importance of craft shops and hence of the proximity factor; generalised recruitment of manpower with level V training, and mobility within a rather restricted area, etc.

Such regionally-oriented approaches are particularly useful in a context of decentralisation in vocational training and a strategic decision by the sector to negotiate and enter into goal-oriented contracts with regional councils and the State. Such an attempt at regional regulation of training supply in accordance with the manpower and qualification requirements of enterprises operating in the regions (box 2) may be expected to generate **diagnoses and the formulation of specific lines of action**. What is required is to pinpoint specific regional features of motor vehicle repairs and on the basis of these, to negotiate adjustments with the regional and decentralised public authorities.

In an activity like motor vehicle repairs which is carried on all over the country, what produces specific variations are not job contents as such – in principle, vehicle maintenance and repairs are performed in the same way everywhere. Variations tend to be of a structural nature. They reflect, on the one hand, "macro-local" characteristics not confined to a single sector (socio-economic dynamics of the area, demography, training traditions and practices, etc.), and on the other hand, the structural characteristics of the sector in the area. The predominant business forms vary considerably from one geographical area to another, depending on how urbanised the area is. One does not find rapid repair shops and car service centres, or big distributors, in thinly populated areas. The regional peculiarities of motor vehicle repairs have been identified with the help of a method for compiling and comparing "regional profiles" (box 2), using an array of indicators devised specifically for this purpose.<sup>15</sup>

##### 1. The range of possibilities

**There do indeed appear to be pronounced regional peculiarities, despite the fact that motor vehicle repair is a classic example of a common-or-garden activity carried on country-wide.** Differences in "profile" can be considerable and

---

<sup>15</sup> The set of criteria applied in the Provence Alpes Côte d'Azur Region are shown in the appendix. This work was carried out by the National Association for Adult Training (ANFA), taking up the CEREQ- initiative.

reveal situations which are still susceptible, at least in part, of specific treatment. The data would certainly appear to confirm the hypothesis that qualification practices differ from one region to another – and by extension, from one *département* and labour pool to another.

In the Poitou-Charentes region, for example, the under-25 age group represent a significant proportion of the workforce in the sector (21%), and there is considerable growth in numbers of level V diploma holders (+45.7%) – in which two indicators the region is the highest in the country. This stands in contrast with Picardy, where the under-25s are in much smaller proportion (13.8%) and numbers of level V diploma holders are growing more slowly (+14.8%), but where there is considerable growth in numbers of level IV diploma holders (+50%). **The regions, then, typically exhibit predominant patterns of evolution and choice of qualifications and recruitment which differ significantly from one another**

This kind of regional influence needs to be taken into account, for it influences the main variables that reflect the functioning and dynamics of manpower management in the sector – the proportion of young people in the workforce, the relative weight of very small enterprises, the importance of apprenticeship training, the relative weight of skilled and unskilled workers, supervisors and technicians, the place of levels V and IV, etc. The problems to be addressed, the objectives to be set and the avenues to be promoted in matters of training cannot be dealt with by simply following the issues and guidelines defined nationally; it is here that the notion of "tactical" actions adapted to each regional environment, as distinct from other regional environments, comes into its own.

## **2. Non-determinism**

The regionalised approach reveals a factor of importance for understanding recruiting practices: **the main structural characteristics of enterprises do not influence modes of training and intake or the kinds of diploma held by workers.** Some regions exhibit similar structural profiles – a comparable proportion of craft establishments, for example – but link training to employment in different ways. Their approach to vocational training mechanisms is not the same. This means that enterprises of the same size or belonging to the same network and facing similar employment and training problems adopt different patterns of qualification and recruitment because the attributes and resources of the geographical areas in which they operate are not the same.

By way of illustration, the proportion of very small enterprises is relatively high in the Poitou-Charentes and Languedoc-Roussillon regions – at least 1/4 of the workforce belong to units with five employees or less. And yet the structure as

regards jobs (proportion of unskilled workers) and diplomas (proportion and evolution of holders of level V and level IV qualifications) are significantly different. As a result, the pattern of choices in terms of qualifications and recruitment are different (see appendices). Even if they are related, **this does not mean that there is a mechanical relationship between the structure of enterprises and modes of training and hiring.** The lack of a mechanical relationship becomes even more evident if we examine the extent of apprenticeship and the relative weight of craft establishments in different regions (graph 4). Regions where craft establishments are relatively numerous, like Poitou-Charentes (18.1% of the workforce) and Limousin (18%), do not go in for apprenticeship to the same extent – 48.2% and 27.5% respectively of persons registered in initial vocational training are apprentices.

The influence of geographical area on patterns of training and recruitment in enterprises is thus confirmed as regards motor vehicle repair trades. **Traditions, mechanisms, regional-level policies and practices in training establishments operate independently and are not confined to the sector,** which shows that there is not a deterministic relationship between employment and training. A regionalised approach will therefore relativise the analytical value attached to the influence of forms of enterprise and the contexts in which they operate – hence, it is reasonable to suppose that enterprises of the same size or belonging to the same network will differ at least slightly in their approach to human resources management and recruitment in accordance with the geographical area in which they operate. This highlights the utility of combining an approach based on enterprises with an approach based on regional and local contexts as a means to understanding recruitment in the motor vehicle repair sector.

### 3. Taking action

**The specific features and differences found between regions are in principle neither advantageous nor disadvantageous.** When we use this or that indicator to examine a region, or try to establish a pattern using this or that set of indicators, there is never a question *a priori* of a negative or positive gap with respect to the target region which must necessarily be consolidated or closed – there is simply a situation that requires investigating and interpreting, and which it may prove helpful to spotlight. How does it interact with other identified situations to affect the manpower and qualification requirements of enterprises? Does it need to be improved? What room for manoeuvre does existing training allow in which to address this need for improvement? In the light of other regions, what are the possible margins for success?

This brings us to the **phase of interpreting the diagnosis, devising possible future scenarios and negotiating among the partners.** Specific features are

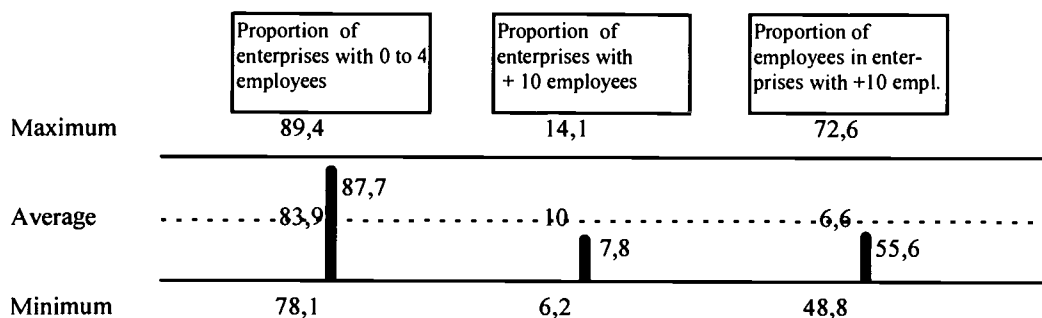
assessed collectively according to the context in which they occur (involvement of "macro-regional" factors of an economic or institutional nature) and to existing habits and modes of coordination (capacity to cooperate and use a common language). The key phase of the initiative – negotiation of objectives and means of putting them in practice – can thus be set in motion. Action proposals are then drawn up by the sector or by the other actors involved, and subjected to discussion before incorporation to the goal-oriented contract.

Very briefly, the important thing in this initiative for analysis and survey of prospects of recruitment is that it should lead to action. Its utility depends on its capacity to generate a diagnosis which will enable the actors to agree on what is essential – priorities (eg, to keep a watch over the development of the supply of "higher" level vocational training), or again, common values and principles of action. Hopefully the actors will be capable of taking up the initiative, and the "informed" analysis of organisational and regional "windows" of recruitment that it provides will help them effectively to reach agreement.

# PROVENCE ALPES COTE D'AZUR

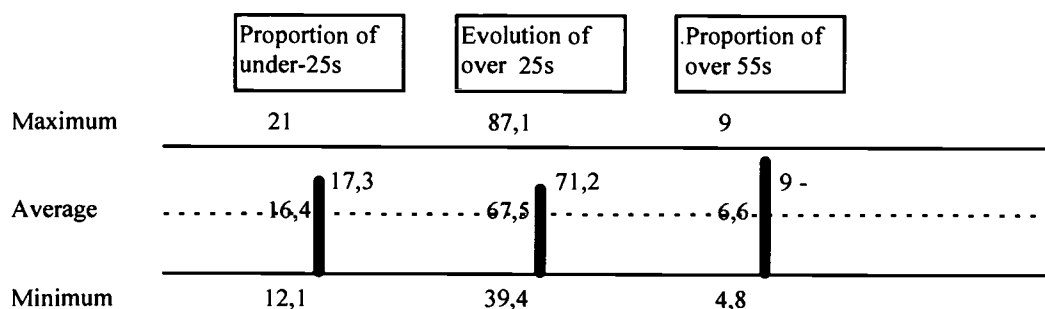
## REGIONAL PROFILE

**Chart 1 -STRUCTURE OF INTERPRISES BY SIZE**



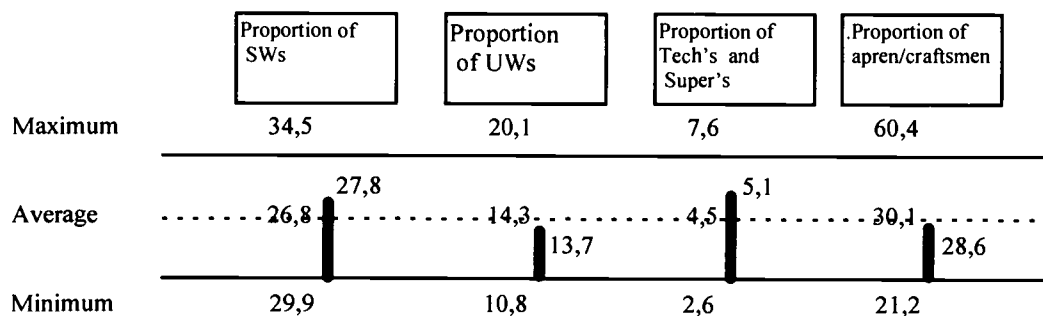
Source: ANFA, SIRENE datafile

**Chart 2 - STRUCTURE OF JOBS IN THE SECTOR BY AGE**



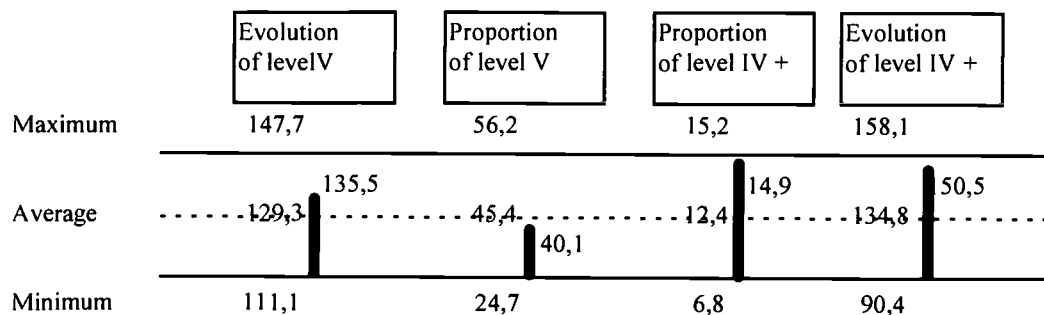
Source: INSEE, RP 82 and 90

**Chart 3 - STRUCTURE OF JOBS BY EMPLOYMENT LEVEL**



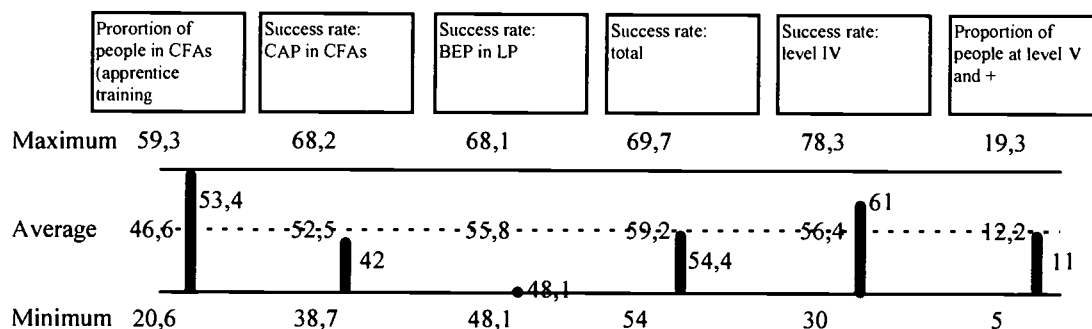
Source: INSEE, RP 90

**Chart 4 - STRUCTURE OF JOBS BY QUALIFICATION LEVEL**



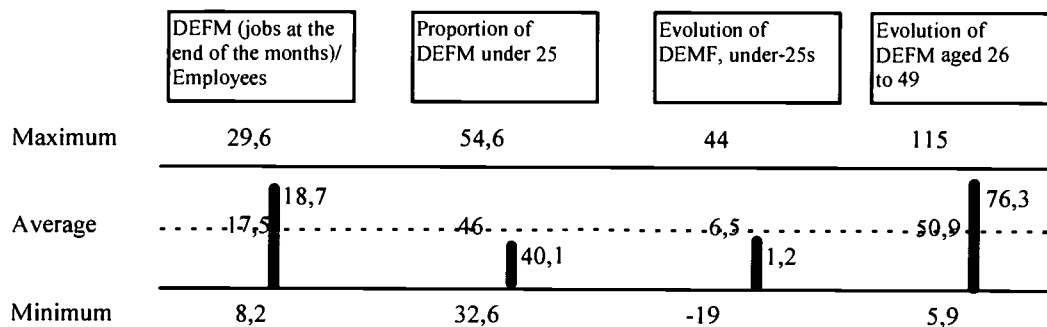
Source: INSEE, RP 90

**Chart 5 - THE TRAINING APPARATUS**



Source: ANFA, Analysis of academic records

**Chart 6 - THE LABOUR MARKET**



Source: ANPE, DEFM, December 1994

## REFERENCES

- **Affichard J., Combes M-C. - 1994** - Apprentis et élèves de LEP, Document, Synthèse, Céreq, no. 93.
- **Amat F., Géhin J-P. - 1987** - Accès des jeunes à l'emploi et mobilité des actifs : le cas des emplois d'exécution. In: Formation-Emploi, no. 18, April-June.
- **APCM (Assemblée permanente des chambres de métier) - 1993** - Chiffres Clés. Réparation automobile. In: Telex métiers APCM, No. 20, 31 May.
- **Biéganski R., Cadet J-P., Grando J-M. (col.) - 1994a** - Prospective des emplois et des formations au sein de la réparation automobile, rapport d'étude. Céreq, April.
- **Biéganski R., Cadet J-P., Grando J-M. - 1994b** - Une branche et des territoires : le cas de la réparation automobile. In: Bref, no. 98, Céreq, May.
- **Bidault F. - 1993** - Apprentissage et réseaux In: Economies et Sociétés, La firme et la dynamique de l'apprentissage, collection Dynamique technologique et organisationnelle, no. 5/1993.
- **Bordigoni M. - 1993** - L'apprentissage en 1992 : une formation en course de renouvellement. In: Bref, no. 86, Céreq, April.
- **Campinos-Dubernet M., Grando J-M. - 1984** - Le BTP de 1945 à 1980 : les évolutions progressives des conditions d'emploi et de travail. In: Formation-Emploi, no. 6, April-June.
- **Céreq - 1980** - Les mécaniciens réparateurs d'automobiles. Dossier d'information à l'usage des commissions professionnelles consultatives, bureau des statistiques professionnelles, June.
- **Chambre des métiers de l'Ain - 1990** - Pistes de développement pour les artisans de la réparation auto.
- **Delage J-J., Jacob P. - 1993** - Qualité de service. Quel service performant pour une voiture fonctionnelle ? In: convention GIPA 1993. Trois impératifs pour une Europe gagnante : la Qualité, les Hommes, le Professionnalisme des métiers, compte-rendu des interventions. June.
- **Elbaum M., Marchand O. - 1993** - Emploi et chômage des jeunes dans les pays industrialisés. In: Premières informations, no. 34, Insee. October.
- **Fournier C. - 1993** - La population active en 1990 : plus diplômée, plus tertiaire, plus féminine. In: Bref, no. 87, Céreq, May.
- **Fournier C., Kirsch E., Kirsch J-L., Moreno C., Savelli L., Werquin P. - 1994** - L'actualité du CAP et de BEP. In: Bref, no. 99, Céreq, June.
- **Freyssenet M. - 1979** - Division du travail et mobilisation quotidienne de la main-d'oeuvre. Le cas de Renault et de Fiat. Centre de sociologie urbain.
- **Gautier-Moulin P., coord. - 1993** - Branches professionnelles et formation : l'automobile et les transports, dossier du centre INFFO rassemblant des contributions de membres de l'ANFA. In: Actualité de la formation permanente, January-February.



- **Grando J-M. - 1983** - Industrie et gestion de la main-d'oeuvre. In: Formation-Emploi, no. 1, January-March.
- **INSEE Résultats - 1992** - Les entreprises des services en 1990, no. 52-53/1, December.
- **ITB (Institut Technik & Bildung) - 1993** - Emploi, travail et formation dans le secteur de la réparation et de la distribution d'automobiles en Europe, étude pour le programme Force, French translation, September.
- **(de) Jouvenel B. - 1993** - Sur la démarche prospective. Un bref guide méthodologique. In Futuribles, September.
- **Lichtenberger Y. - 1993** - Loi quinquennale sur la formation professionnelle et nouvelles responsabilités régionales. Address to the Rhône-Alpes Regional Council, 17 December. Céreq.
- **Moebus M. - 1992** - Contribution du Céreq au contrat d'études prévisionnelles Bâtiment et travaux publics (I). Effectifs occupés, flux d'entrées et de sorties dans le secteur du BTP. Céreq, July.
- **Paché G., Paraponis C. - 1992** - L'entreprise en réseau. Paris, PUF.
- **Peretti J-M. - 1987** - Gestion des ressources humaines. Paris, Vuibert.
- **Savoye B. - 1992** - Petites entreprises de l'artisanat, du commerce et des services. In: INSEE Résultats, no. 185-186, collection Système productif, no. 48-49, April.
- **Schwartz P. - 1993** - La planification stratégique par scénarios. In: Futuribles, May.
- **Sivan B., Aguetant N. - 1994** - La formation continue dans le commerce et la réparation automobile, rapport pour le programme Force. Bipe conseil, February.
- **Stroobants M. - 1993** - Les paradoxes du forgeron. In: Education Permanente, L'alternance, no. 115/1993-2.
- **Tanguy L., dir. - 1986** - L'introuvable relation formation-emploi. Paris, La documentation française.



# CEDEFOP — European Centre for the Development of Vocational Training

## Evolution of employment and qualifications in motor vehicle repairs in France

Contribution for the CIRETOQ meeting organized at CEREQ/Marseille by CEDEFOP on 20 and 21 November 1995

Richard Bieganski  
Jean-Paul Cadet

CEDEFOP Document

Luxembourg: Office for Official Publications of the European Communities

1996 — II, 37 pp. — 21.0 x 29.7 cm

ISBN 92-827-8404-5

Price (excluding VAT) in Luxembourg: ECU 5.50

Venta • Saig • Verkauf • Πωλήσεις • Sales • Vente • Vendita • Verkoop • Venda • Myynti • Försäljning

### BELGIQUE/BELGIE

Moniteur belge/Belgisch Staatsblad  
Rue de Louvain 40-42/  
Leuvenseweg 40-42  
B-1000 Bruxelles/Brussel  
Tél. (32-2) 552 22 11  
Fax (32-2) 511 01 84

#### Jean De Lannoy

Avenue du Roi 202/  
Koningstraat 202  
B-1000 Bruxelles/Brussel  
Tél. (32-2) 538 51 69  
Fax (32-2) 538 06 41  
e-mail: jean.de.lannoy@infoboard.be

#### Librairie européenne/ Europese Boekhandel

Rue de la Loi 244/  
Weststraat 244  
B-1040 Bruxelles/Brussel  
Tél. (32-2) 295 26 39  
Fax (32-2) 735 08 60

### DANMARK

#### J. H. Schultz Information A/S

Herstedvang 10-12  
DK-2620 Alberslund  
Tel. (45) 43 63 23 00  
Fax (45) 43 63 19 69  
e-mail: schultz@schultz.dk

### DEUTSCHLAND

#### Bundesanzeiger Verlag

Bräse Straße 78-80  
Postfach 10 05 34  
D-50567 Köln  
Tel. (49-221) 20 29-0  
Fax (49-221) 20 29 278

### GREECE/ELLADA

#### G.C. Eleftheroudakis SA

International Bookstore  
Pieraplasticos 17  
GR-105 64 Athens  
Tel. (30-1) 331 41 82  
Fax (30-1) 323 98 21

### ESPAÑA

#### Mundi Prensa Libros, SA

Castelló, 37  
E-28001 Madrid  
Tel. (34-1) 431 33 99/431 32 22/435 36 37  
Fax (34-1) 575 39 99  
e-mail: mundiprensa@tsai.es

#### Boletín Oficial del Estado

Tratado 27-29  
E-28010 Madrid  
Tel. (34-1) 538 22 95/538 22 97  
Fax (34-1) 538 22 67

#### Succursals:

#### Mundi Prensa Barcelona

Consell de Cent, 391  
E-08009 Barcelona  
Tel. (34-3) 488 34 82  
Fax (34-3) 487 76 59

#### Libreria de la Generalitat de Catalunya

Rembles del Estudis, 118  
Palau Major  
E-08002 Barcelona  
Tel. (34-3) 302 68 33/302 64 62  
Fax (34-3) 302 12 99

### FRANCE

#### Journal officiel

Service des publications des CE  
28, rue Dussault  
F-75727 Paris Cedex 15  
Tel. (33-1) 40 58 77 01/31  
Fax (33-1) 40 58 77 00

### IRELAND

#### Government Supplies Agency

Publications Section  
4-5 Harcourt Road  
Dublin 2  
Tel. (353-1) 661 31 11  
Fax (353-1) 475 27 60

### ITALIA

#### Licosa SpA

Via Duca di Calabria 1/1  
Casella postale 552  
I-50125 Firenze  
Tel. (39-55) 64 54 15  
Fax (39-55) 64 12 57  
e-mail: licosa@libero.it

### GRAND-DUCHÉ DE LUXEMBOURG

#### Messageries du livre S&T

5, rue Raiffaen  
L-2411 Luxembourg  
Tél. (352) 40 10 20  
Fax (352) 490 661  
e-mail: mdtp@pt.lu

#### Abonnements:

#### Messageries Paul Kraus

11, rue Christophe Plantin  
L-2339 Luxembourg  
Tél. (352) 499 88 58  
Fax (352) 499 888 444  
e-mail: mpk@pt.lu

### NETHERLAND

#### SDU Uitgeverijen

Erasmus Fonds  
Christoffel Plantinstraat 2  
Postbus 20014  
2500 EA 's-Gravenhage  
Tel. (31-70) 378 98 80  
Fax (31-70) 378 97 83

### ÖSTERREICH

#### Manzsche Verlags- und Universitätsbuchhandlung GmbH

Siebenbrunnengasse 21  
Postfach 1  
A-1050 Wien  
Tel. (43-1) 53 161 (334 oder 340)  
Fax (43-1) 53 161 (339)  
e-mail: buchlieferung@manz.co.at

### PORTUGAL

#### Imprensa Nacional-Casa da Moeda, EP

Rua Marquês de Sá da Bandeira, 16 A  
P-1050 Lisboa Codex  
Tel. (351-1) 353 03 99  
Fax (351-1) 353 02 94/384 01 32

#### Distribuidores de Livros

#### Bertrand Ltd

Grupo Bertrand, SA  
Rua das Terras dos Vales, 4-A  
Apartado 60007  
P-2700 Amadora Codex  
Tel. (351-1) 495 90 50/495 87 87  
Fax (351-1) 496 02 55

### SUOMI/FINLAND

#### Akatemien Kirjakauppa / Akademiska Bokhandeln

Pohjoisesplanadi 39/  
Norrre esplanaden 39  
PL/POB 126  
FIN-00101 Helsinki/Helsingfors  
Tel. (358) 121 41 41  
Fax (358) 121 44 35  
e-mail: akatkaus@stockmann.maine.fi

### SVERIGE

#### BTJ AB

Traktorvägen 11  
PO Box 200  
S-221 00 LUND  
Tel. (46) 18 00 00  
Fax (46) 18 01 25

### UNITED KINGDOM

#### HMSO Books (Agency Section)

HMSO Publications Centre  
51, Nine Elms Lane  
London SW8 5QR  
Tel. (44-171) 873 9090  
Fax (44-171) 873 8463

### ICELAND

#### Bokabud Larusar Blöndal

Skolavörðustíg, 2  
IS-101 Reykjavík  
Tel. (354) 55 15 650  
Fax (354) 55 25 60

### NORGE

#### NIC Info A/S

Bertrand Narvesens vei 2  
Boks 6512 Etterstad  
N-0606 Oslo  
Tel. (47-22) 57 33 34  
Fax (47-22) 66 19 01

### SCHWEIZ/SUISSE/SVIZZERA

#### OSEC

Stämpfenbechtstraße 85  
CH-8035 Zürich  
Tel. (41-1) 365 54 54  
Fax (41-1) 365 54 11  
e-mail: urs.leimbacher@sec.ossec.ch

### BULGARIA

#### Europress Klassika Bk Ltd

76, Gunko Street  
BG-1463 Sofia  
Tel. (359-2) 81 64 73  
Fax (359-2) 81 64 73

### ČESKÁ REPUBLIKA

#### NIS ČR - prodejna

Konvikská 5  
CZ-113 57 Praha 1  
Tel. (42-2) 24 22 94 33/24 23 09 07  
Fax (42-2) 24 22 94 33  
e-mail: rkposp@ec.nis.cz

### HRVATSKA

#### Mediastride Ltd

Pavla Hatza 1  
HR-4100 Zagreb  
Tel. (38-1) 43 03 92  
Fax (38-1) 44 40 59

### MAGYARORSZÁG

#### Euro Info Service

Europa Ház  
Magyarai  
H-1138 Budapest  
Tel. (36-1) 11 16 06/11 16 216  
Fax (36-1) 302 50 35

### POLSKA

#### Business Foundation

ul. Krucza 38/42  
PL-00-512 Warszawa  
Tel. (48-22) 621 99 93/628 28 82  
Fax (48-22) 621 97 61: Free line (0-39) 12 00 77

### ROMÂNIA

#### Euromedia

Str. Grig. Barthelemy Nr 41  
RO-70749 Bucuresti  
Tel. (41) 210 44 01/614 06 64  
Fax (41) 210 44 01

### RUSSIA

#### CCEC

9,60-tsiya Otkrybrya Av.  
117312 Moscow  
Tel. (095) 135 52 27  
Fax (095) 135 52 27

### SLOVAKIA

#### Slovenská Technická Knitnica

Námestie slobody 19  
SLO-81223 Bratislava 1  
Tel. (42-7) 53 18 364  
Fax (42-7) 53 18 364  
e-mail: europ@ttb1.stk.stuba.sk

### MALTA

#### Miller Distributors Ltd

Malta International Airport  
PO Box 25  
LQA 05 Malta  
Tel. (356) 66 44 88  
Fax (356) 67 67 99

### TÜRKİYE

#### Dönys Intofel A.S.

İstiklal Caddesi No 469  
TR-80050 Tönel-İstanbul  
Tel. (90-212) 251 91 96 / 427 02 10  
Fax (90-212) 251 91 97

### ISRAEL

#### R.O.Y. International

17, Shimon Hatanasi Street  
PO Box 13056  
61130 Tel Aviv  
Tel. (972-3) 546 14 23  
Fax (972-3) 546 14 42  
e-mail: roy@nervision.net.il

#### Sub-agent for the Palestinian Authority:

#### Index Information Services

PO Box 19502

Jerusalem

Tel. (972-2) 27 18 34

Fax (972-2) 27 12 19

### EGYPT

#### The Middle East Observer

41, Shari Street

Cairo

Tel. (20-2) 39 26 919

Fax (20-2) 39 39 732

### UNITED STATES OF AMERICA

#### Unipub

4611-F Assembly Drive  
MD20706 Lanham  
Tel. (800) 274-4888 (toll free telephone)  
Fax (800) 865-3450 (toll free fax)

### CANADA

#### Uniquement abonnements/ Subscriptions only:

#### Renouf Publishing Co. Ltd

1294 Algoma Road  
N1B 3W8 Ottawa, Ontario  
Tel. (1-613) 741 73 33  
Fax (1-613) 741 54 39  
e-mail: renouf@renouf.ca  
For monographs see: Unipub

### AUSTRALIA

#### Hunter Publications

PO Box 404  
3167 Abbotsford, Victoria  
Tel. (3) 9417 53 81  
Fax (3) 9419 71 54

### JAPAN

#### PSI-Japan

Kyaku Dome, Tokyo Kojimachi P.O.  
Tokyo 102  
Tel. (81-3) 3234 69 21  
Fax (81-3) 3234 69 15  
e-mail: psijapan@psj.com  
URL: www.ps-japan.com

### SOUTH AND EAST ASIA

#### Legal Library Services Limited

Orchard  
PO Box 0523  
912318 Singapore  
Tel. (65) 243 24 98  
Fax (65) 243 24 79  
e-mail: elaine@leg-lib.demon.co.uk

### SOUTH AFRICA

#### Safo

5th Floor Export House,  
CNR Maude & West Streets  
PO Box 762 706  
2146 Sandton  
Tel. (27-11) 883 37 37  
Fax (27-11) 883 65 69

### ANDERE LÄNDER

### OTHER COUNTRIES

### AUTRES PAYS

Bitte wenden Sie sich an ein Büro Ihrer Wahl.  
Please, address yourself to the sales office of your choice.  
Veuillez vous adresser au bureau de vente de votre choix.

European Centre for the Development of Vocational Training  
Marinou Antipa 12, **GR-57001 Thessaloniki**  
Tel.: 30-31+49 01 11, Fax: 30-31+49 01 02  
E-mail: [info@cedefop.gr](mailto:info@cedefop.gr)

Price (excluding VAT) in Luxembourg: ECU 5.50

ISBN 92-827-8404-5



OFFICE FOR OFFICIAL PUBLICATIONS  
OF THE EUROPEAN COMMUNITIES  
L-2985 Luxembourg

BEST COPY AVAILABLE



9 789282 784044



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



## NOTICE

### REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").